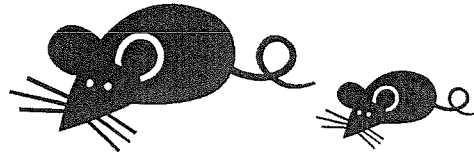


Name _____

Period _____

Cloning Mimi



Directions

Log on to the computer using your own account. If you do not have an account or do not remember your username or password please ask for assistance.

Open up Internet Explorer or Safari and access the following website:

<http://GSLC.genetics.utah.edu/units/cloning>

A. Click on "What is cloning?" to learn more about cloning. Read through the page and answer the questions below.

1. What is cloning?
2. Give an example of naturally occurring clones.
3. Play the two simulations to compare natural twinning and artificial embryo twinning.
4. Check out the videos of enucleation (taking out the nucleus) and nuclear transfer (inserting a different nucleus) in a real cell!
5. Play the simulations to see how natural reproduction compares to somatic cell nuclear transfer (cloning).

B. Go back to the original webpage. Now click on "Click and Clone" to enter the lab and clone your own mouse. After you have successfully cloned Mimi, answer the following questions.

1. What material does Mimi contribute to the cloning process?
2. What material does Megdo contribute to the cloning process?
3. What is Momi's job in the cloning process?
4. What color is the cloned baby mouse?
5. Which mouse is the cloned baby an exact copy of? (Mimi, Megdo, or Momi)
6. Is the baby mouse genetically related to Megdo the egg donor or Momi the surrogate? Why or why not?